MITSUBISHI ELECTRIC

SPLIT-TYPE AIR CONDITIONERS

INDOOR UNIT

MS-GF50VA MS-GF60VA MS-GF80VA

CE

English is original.

Übersetzung des Originals

Traduction du texte d'origine

Vertaling van het origineel

Traducción del original

Traduzione dell'originale

Μετάφραση του αρχικού

Tradução do original

Oversættelse af den originale tekst

Översättning från originalet

Orijinalin çevirisi

Перевод оригинала

OPERATING INSTRUCTIONS For user
- To use this unit correctly and safely, be sure to read these operating instructions before use.

English

BEDIENUNGSANLEITUNG For den Anwender
- Für einen sicheren und ordnungsgemäßen Gebrauch des Geräts unbedingt diese Bedienungsanleitung vor der Inbetriebnahme durchlesen.

Deutsch

NOTICE D'UTILISATION A l'attention des clients
- Pour avoir la certitude d'utiliser cet appareil correctement et en toute sécurité, veuillez lire cette notice d'instructions avant de mettre le climatiseur sous tension.

Français

BEDIENINGSINSTRUCTIES Voor de klant
- Om dit apparaat correct en veilig te kunnen gebruiken moet u deze bedieningsinstructies voor gebruik eerst doorlezen.

Nederlands

MANUAL DE INSTRUCCIONES Para los clientes
- Para utilizar esta unidad de forma correcta y segura, lea previamente estas instrucciones de funcionamiento.

Español

LIBRETTO D'ISTRUZIONI Per gli utenti
- Per utilizzare correttamente ed in tutta sicurezza questo apparecchio, leggere il presente libretto d'istruzioni prima dell'uso.

Italiano

ΟΔΗΓΙΕΣ ΛΕΙΤΟΥΡΓΙΑΣ Για το χρήστη
- Για να χρησιμοποιήσετε αυτή τη μονάδα σωστά και με ασφάλεια, βεβαιωθείτε ότι έχετε διαβάσει αυτό το εγχειρίδιο οδηγιών πριν από τη χρήση.

Ελληνικά

INSTRUÇÕES DE OPERAÇÃO Para o utilizador
- Para utilizar esta unidade correctamente e com segurança, certifique-se de que lê estas instruções de operação antes da utilização.

Português

BETJENINGSVEJLEDNING Til kunden
- Læs denne betjeningsvejledningen før brug, så enheden bruges korrekt og sikkert.

Dansk

BRUKSANVISNING För användaren
- Läs bruksanvisningen innan enheten tas i bruk så att den används säkert och på rätt sätt.

Svenska

ÇALIŞTIRMA TALİMATLARI Kullanıcı için
- Bu üniteyi doğru ve güvenli bir biçimde kullanmak için, kullanmadan önce bu işletim talimatlarını okuduğunuzdan emin olun.

Türkçe

ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ Для пользователя
- В целях правильной и безопасной эксплуатации данного устройства обязательно перед его использованием прочтите настоящее руководство по эксплуатации.

Русский

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SAFETY PRECAUTIONS

- Since rotating parts and parts which could cause an electric shock are used in this product, be sure to read these “Safety Precautions” before use.
- Since the cautionary items shown here are important for safety, be sure to observe them.
- After reading this manual, keep it together with the installation manual in a handy place for easy reference.

Marks and their meanings

⚠ WARNING : Incorrect handling could cause serious hazard, such as death, serious injury, etc. with a high probability.

⚠ CAUTION : Incorrect handling could cause serious hazard depending on the conditions.

Meanings of symbols used in this manual

: Be sure not to do.

: Be sure to follow the instruction.

: Never insert your finger or stick, etc.

: Never step onto the indoor/outdoor unit and do not put anything on them.

: Danger of electric shock. Be careful.

: Be sure to disconnect the power supply plug from the power outlet.

: Be sure to shut off the power.

⚠ WARNING

Do not connect the power cord to an intermediate point, use an extension cord, or connect multiple devices to a single AC outlet.
- This may cause overheating, fire, or electric shock.

Make sure the power plug is free of dirt and insert it securely into the outlet.
- A dirty plug may cause fire or electric shock.

Do not bundle, pull, damage, or modify the power cord, and do not apply heat or place heavy objects on it.
- This may cause fire or electric shock.

Do not turn the breaker OFF/ON or disconnect/connect the power plug during operation.
- This may create sparks, which can cause fire.
- After the indoor unit is switched OFF with the remote controller, make sure to turn the breaker OFF or disconnect the power plug.

Do not expose your body directly to cool air for a prolonged length of time.
- This could be detrimental to your health.

The unit should not be installed, relocated, disassembled, altered, or repaired by the user.
- An improperly handled air conditioner may cause fire, electric shock, injury, or water leakage, etc. Consult your dealer.
- If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent in order to avoid a hazard.

When installing, relocating, or servicing the unit, make sure that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit.
- Any presence of foreign substance such as air can cause abnormal pressure rise and may result in explosion or injury.
- The use of any refrigerant other than that specified for the system will cause mechanical failure, system malfunction, or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Do not insert your finger, a stick, or other objects into the air inlet or outlet.
- This may cause injury, since the fan inside rotates at high speeds during operation.

In case of an abnormal condition (such as a burning smell), stop the air conditioner and disconnect the power plug or turn the breaker OFF.
- A continued operation in the abnormal state may cause a malfunction, fire, or electric shock. In this case, consult your dealer.

When the air conditioner does not cool or heat, there is a possibility of refrigerant leakage. In this case, consult your dealer. If a repair involves recharging the unit with refrigerant, ask the service technician for details.
- The refrigerant used in the air conditioner is safe. Normally, it does not leak. However, if refrigerant leaks and comes in contact with a heat source such as a fan heater, kerosene heater, or cooking stove, it will create a harmful gas.

The user should never attempt to wash the inside of the indoor unit. Should the inside of the unit require cleaning, contact your dealer.
- Unsuitable detergent may cause damage to plastic material inside the unit, which may result in water leakage. Should detergent come in contact with electrical parts or the motor, it will result in a malfunction, smoke, or fire.

⚠ CAUTION

Do not touch the air inlet or the aluminum fins of the indoor/outdoor unit.
- This may cause injury.

Do not use insecticides or flammable sprays on the unit.
- This may cause a fire or deformation of the unit.

SAFETY PRECAUTIONS

⚠ CAUTION

Do not expose pets or houseplants to direct airflow.
- This may cause injury to the pets or plants.

Do not place other electric appliances or furniture under the indoor/outdoor unit.
- Water may drip down from the unit, which may cause damage or malfunction.

Do not leave the unit on a damaged installation stand.
- The unit may fall and cause injury.

Do not step on an unstable bench to operate or clean the unit.
- This may cause injury if you fall down.

Do not pull the power cord.
- This may cause a portion of the core wire to break, which may cause overheating or fire.

Do not charge or disassemble the batteries, and do not throw them into a fire.
- This may cause the batteries to leak, or cause a fire or explosion.

Do not operate the unit for more than 4 hours at high humidity (80% RH or more) and/or with windows or outside door left open.
- This may cause the water condensation in the air conditioner, which may drip down, wetting or damaging the furniture.
- The water condensation in the air conditioner may contribute to growth of fungi, such as mold.

Do not use the unit for special purposes, such as storing food, raising animals, growing plants, or preserving precision devices or art objects.
- This may cause deterioration of quality, or harm to animals and plants.

Do not expose combustion appliances to direct airflow.
- This may cause incomplete combustion.

Never put batteries in your mouth for any reason to avoid accidental ingestion.
- Battery ingestion may cause choking and/or poisoning.

Before cleaning the unit, switch it OFF and disconnect the power plug or turn the breaker OFF.
- This may cause injury, since the fan inside rotates at high speeds during operation.

When the unit will be unused for a long time, disconnect the power plug or turn the breaker OFF.
- The unit may accumulate dirt, which may cause overheating or fire.

Replace all batteries of the remote controller with new ones of the same type.
- Using an old battery together with a new one may cause overheating, leakage, or explosion.

If the battery fluid comes in contact with your skin or clothes, wash them thoroughly with clean water.
- If the battery fluid comes in contact with your eyes, wash them thoroughly with clean water and immediately seek medical attention.

Ensure that the area is well-ventilated when the unit is operated together with a combustion appliance.
- Inadequate ventilation may cause oxygen starvation.

Turn the breaker OFF when you hear thunder and there is a possibility of a lightning strike.
- The unit may be damaged if lightning strikes.

After the air conditioner is used for several seasons, perform inspection and maintenance in addition to normal cleaning.
- Dirt or dust in the unit may create an unpleasant odor, contribute to growth of fungi, such as mold, or clog the drain passage, and cause water to leak from the indoor unit. Consult your dealer for inspection and maintenance, which require specialized knowledge and skills.

Do not operate switches with wet hands.
- This may cause electric shock.

Do not clean the air conditioner with water or place an object that contains water, such as a flower vase, on it.
- This may cause fire or electric shock.

Do not step on or place any object on the outdoor unit.
- This may cause injury if you or the object falls down.

IMPORTANT

Dirty filters cause condensation in the air conditioner which will contribute to the growth of fungi such as mold. It is therefore recommended to clean air filters every 2 weeks.

For installation

⚠ WARNING

Consult your dealer for installing the air conditioner.
- It should not be installed by the user since installation requires specialized knowledge and skills. An improperly installed air conditioner may cause water leakage, fire, or electric shock.

Provide a dedicated power supply for the air conditioner.
- A non-dedicated power supply may cause overheating or fire.

Do not install the unit where flammable gas could leak.
- If gas leaks and accumulates around the outdoor unit, it may cause an explosion.

Earth the unit correctly.
- Do not connect the earth wire to a gas pipe, water pipe, lightning rod, or a telephone ground wire. Improper earthing may cause electric shock.

⚠ CAUTION

Install an earth leakage breaker depending on the installation location of the air conditioner (such as highly humid areas).
- If an earth leakage breaker is not installed, it may cause electric shock.

Ensure that the drain water is properly drained.
- If the drain passage is improper, water may drip down from the indoor/outdoor unit, wetting and damaging the furniture.

In case of an abnormal condition
Immediately stop operating the air conditioner and consult your dealer.

DISPOSAL

To dispose of this product, consult your dealer.

Fig. 1

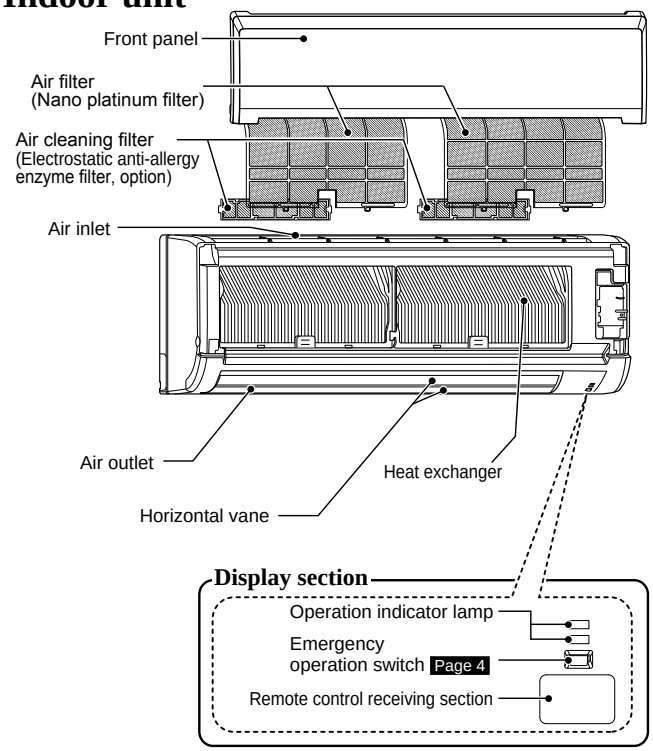
Note:

This symbol mark is for EU countries only.
This symbol mark is according to the directive 2002/96/EC Article 10 Information for users and Annex IV, and/or to the directive 2006/66/EC Article 20 Information for end-users and Annex II.

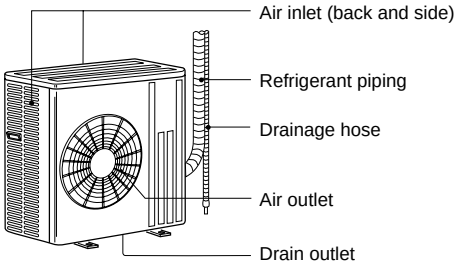
Your MITSUBISHI ELECTRIC product is designed and manufactured with high quality materials and components which can be recycled and/or reused.
This symbol means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.
If a chemical symbol is printed beneath the symbol (Fig. 1), this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration. This will be indicated as follows:
Hg: mercury (0,0005%), Cd: cadmium (0,002%), Pb: lead (0,004%)
In the European Union there are separate collection systems for used electrical and electronic products, batteries and accumulators.
Please, dispose of this equipment, batteries and accumulators correctly at your local community waste collection/recycling centre.
Please, help us to conserve the environment we live in!

NAME OF EACH PART

Indoor unit

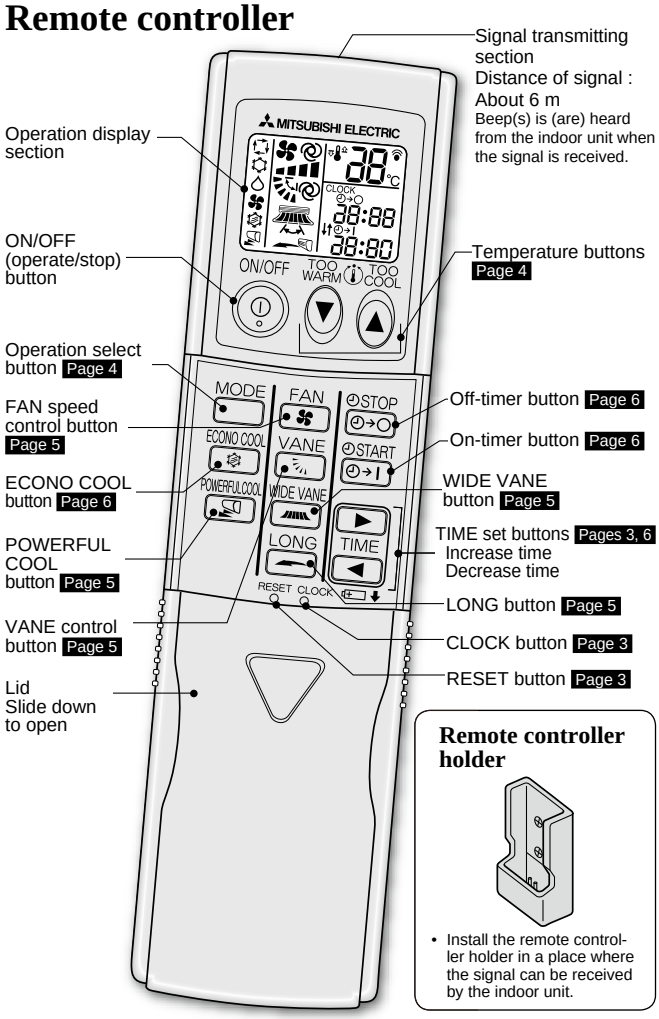


Outdoor unit



Outdoor units may be different in appearance.

Remote controller



Remote controller holder

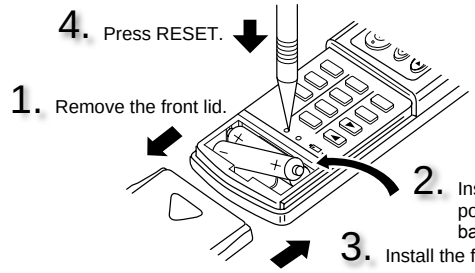
- Install the remote controller holder in a place where the signal can be received by the indoor unit.

Only use the remote controller provided with the unit.
Do not use other remote controllers.
If two or more indoor units are installed in proximity to one another, an indoor unit that is not intended to be operated may respond to the remote controller.

PREPARATION BEFORE OPERATION

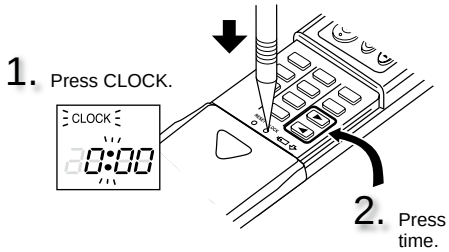
Before operation: Insert the power supply plug into the power outlet and/or turn the breaker on.

Installing the remote controller batteries



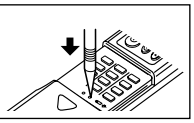
- Make sure the polarity of the batteries is correct.
- Do not use manganese batteries and leaking batteries. The remote controller could malfunction.
- Do not use rechargeable batteries.
- Replace all batteries with new ones of the same type.
- Batteries can be used for approximately 1 year. However, batteries with expired shelf lives last shorter.
- Press RESET gently using a thin instrument.
  If the RESET button is not pressed, the remote controller may not operate correctly.

Setting current time

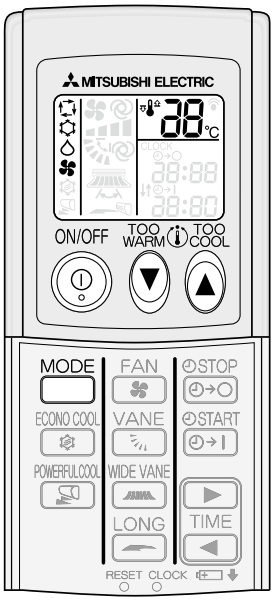

1. Press CLOCK.
CLOCK
0:00
2. Press the TIME buttons to set the time.
Each press increases/decreases the time by 1 minute (10 minutes when pressed longer).

3. Press CLOCK again.

- Press CLOCK gently using a thin instrument.



SELECTING OPERATION MODES



1 Press ON/OFF to start the operation.

2 Press MODE to select operation mode. Each press changes mode in the following order:

(I FEEL) → (COOL) → (DRY) → (FAN)

3 Press TOO COOL or TOO WARM to set the temperature.
Each press raises or lowers the temperature by 1°C.

Press ON/OFF to stop the operation.
- The same setting is selected the next time by simply pressing ON/OFF.

Operation indicator lamp

The operation indicator lamp shows the operation state of the unit.

Indication	Operation state	Room temperature
☀ ☀	The unit is operating to reach the set temperature	About 2°C or more away from set temperature
☀ ○	The room temperature is approaching the set temperature	About 1 to 2°C from set temperature

☀ Lighted ○ Not lighted

I FEEL mode

The unit selects the operation mode according to the room temperature when I FEEL is selected. When the room temperature is higher than 25°C, COOL is selected (set temperature: 24°C). When the room temperature is lower than 25°C, DRY is selected. However, when operation is stopped and then started within 2 hours, the mode which has been selected previously is operated.

Note:

During COOL operation, the set temperature may not be changed when the room temperature is more than 2°C higher than the set temperature. In this case, please wait until the room temperature drops to within 2°C of the set temperature.

COOL mode

Enjoy cool air at your desired temperature.

DRY mode

Dehumidify your room. The room may be cooled slightly.
Temperature cannot be set during DRY mode.

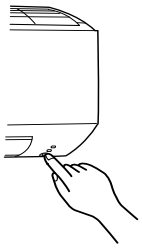
FAN mode

Circulate the air in your room.

Emergency operation

When the remote controller cannot be used...

Emergency operation can be activated by pressing the emergency operation switch (E.O.SW) on the indoor unit.



Each time the E.O.SW is pressed, the operation changes in the following order:

Operation indicator lamp

☀ Emergency COOL
○ Stop

Set temperature : 24°C
Fan speed : Medium
Horizontal vane : Auto

Note:

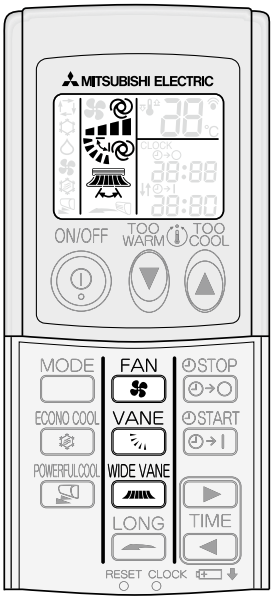
The first 30 minutes of operation is test run. Temperature control does not work, and fan speed is set to High.

Auto restart function

If a power failure occurs or the main power is turned off during operation, “Auto restart function” automatically starts operation in the same mode as the one set with the remote controller just before the shutoff of the main power. When timer is set, timer setting is cancelled and the unit starts operation when power is resumed.

If you do not want to use this function, please consult the service representative because the setting of the unit needs to be changed.

FAN SPEED AND AIRFLOW DIRECTION ADJUSTMENT



FAN

Press [ ] to select fan speed. Each press changes fan speed in the following order:

(AUTO) (Low) (Med.) (High) (Super High)

• Two short beeps are heard from the indoor unit when set to AUTO.

VANE

Press [ ] to select vertical airflow direction. Each press changes airflow direction in the following order:

(AUTO) (1) (2) (3) (4) (5) (SWING)

• Two short beeps are heard from the indoor unit when set to AUTO.

WIDE VANE

Press [ ] to select horizontal airflow direction. Each press changes airflow direction in the following order:

(SWING)

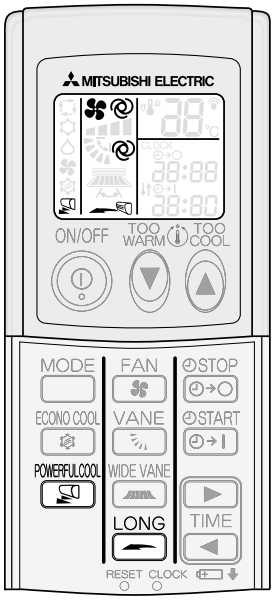
Airflow direction

(AUTO)
The vane is set to the most efficient airflow direction. :horizontal position.

(Manual)
For efficient air conditioning, select the upper position for COOL/DRY. If the position (4) or (5) is selected during COOL/DRY, the vane automatically moves to the horizontal position after 0.5 to 1 hour to prevent any condensation from dripping.

(Swing)
The vane moves up and down intermittently.

LONG OPERATION



LONG

Press [ ] to start LONG operation.

• Fan speed increases and the horizontal vane moves to the position for LONG mode.
• Air reaches to longer distance.

LONG

Press [ ] again to cancel LONG operation.

• LONG operation is cancelled when the ON/OFF, VANE, or ECONO COOL button is pressed.

POWERFUL COOL OPERATION

POWERFUL COOL

Press [ ] during COOL mode page 4 to start POWERFUL COOL operation.

Fan speed : Exclusive speed for POWERFUL mode
Horizontal vane : Set position, or downward airflow position during AUTO setting

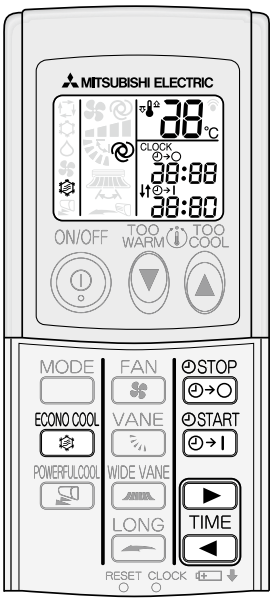
• Temperature cannot be set during POWERFUL COOL operation.

POWERFUL COOL

Press [ ] again to cancel POWERFUL COOL operation.

• POWERFUL COOL operation also is cancelled automatically in 15 minutes, or when the ON/OFF, FAN, or ECONO COOL button is pressed.

ECONO COOL OPERATION



Press ECONO COOL during COOL mode page 4 to start ECONO COOL operation.

The unit performs swing operation vertically in various cycles according to the temperature of airflow. Set temperature is set 2°C higher automatically.

Press ECONO COOL again to cancel ECONO COOL operation.

- ECONO COOL operation is cancelled when the VANE, LONG, or POWERFUL COOL button is pressed.

What is "ECONO COOL"?

Swing airflow (change of airflow) makes you feel cooler than stationary airflow. So, even though the set temperature is automatically set at 2°C higher, it is possible to perform cooling operation with keeping comfort. As a result, energy can be saved.

TIMER OPERATION (ON/OFF TIMER)

1 Press START or STOP during operation to set the timer.

START **(ON timer) : The unit turns ON at the set time.**

STOP **(OFF timer) : The unit turns OFF at the set time.**

*** ⏲→I or ⏲→○ blinks.**

*** Make sure that the current time is set correctly.** Page 3

2 Press ► (Increase) and ◄ (Decrease) to set the time of timer.

Each press increases or decreases the set time by 10 minutes.

- Set the timer while ⏲→I or ⏲→○ is blinking.

3 Press START or STOP again to cancel timer.

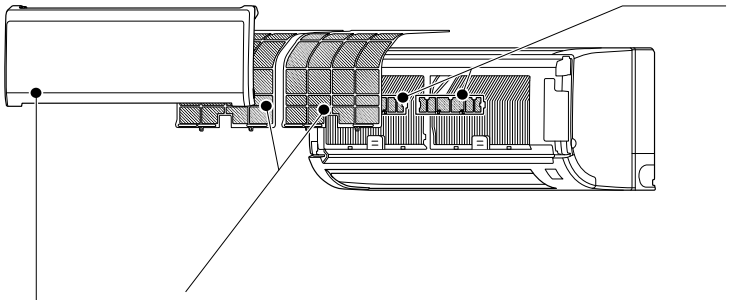
Note:

- ON and OFF timers can be used in combination. ↓↑ mark indicates the order of timer operations.
- If power failure occurs while ON/OFF timer is set, see page 4 "Auto restart function".

CLEANING

Instructions:

- Switch off the power supply or turn off the breaker before cleaning.
- Be careful not to touch the metal parts with your hands.
- Do not use benzine, thinner, polishing powder, or insecticide.
- Use only diluted mild detergents.
- Do not expose parts to direct sunlight, heat, or fire to dry.
- Do not use water hotter than 50°C.



Air filter (Nano platinum filter)

- Clean every 2 weeks
- Remove dirt by a vacuum cleaner, or rinse with water.
- After washing with water, dry it well in shade.

What is “Nano platinum filter”?

Nano platinum is a ceramic particle that includes a platinum nanoparticle. The particles are incorporated into the filter material, which results in providing semi-permanent antibacterial and deodorizing characteristics for the filter. Nano platinum surpasses the catechin (a bioflavonoid that is found in green tea) in performance. Nano platinum filter uses this compound not only to improve air quality but also to eliminate bacteria and viruses. This air filter has a semi-permanent lasting effect even after washing it with water.

Air cleaning filter (Electrostatic anti-allergy enzyme filter, option)

Every 3 months:

- Remove dirt by a vacuum cleaner.

When dirt cannot be removed by vacuum cleaning:

- Soak the filter and its frame in lukewarm water before rinsing it.
- After washing, dry it well in shade.

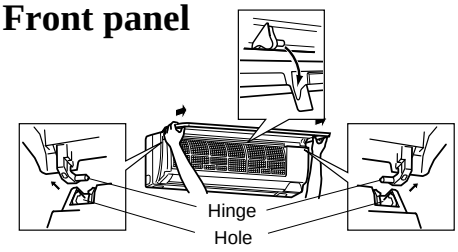
Every year:

- Replace it with a new air cleaning filter for best performance.
- Parts Number MAC-2310FT-E

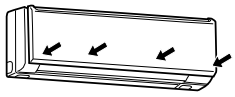
Important

- **Clean the filters regularly for best performance and to** reduce power consumption.
- **Dirty filters cause condensation in the air conditioner which will contribute to the growth of fungi such as mold. It is therefore recommended to clean air filters** every 2 weeks.

Front panel



1. Lift the front panel until a “click” is heard.
2. Hold the hinges and pull to remove as shown in the left illustration.
   - Wipe with a soft dry cloth or rinse it with water.
   - Do not soak it in water for more than two hours.
   - Dry it well in shade.
3. Install the front panel by following the removal procedure in reverse. Close the front panel securely and press the positions indicated by the arrows.



WHEN YOU THINK THAT TROUBLE HAS OCCURRED

Even if these items are checked, when the unit does not recover from the trouble, stop using the air conditioner and consult your dealer.

Symptom	Explanation & Check points
Indoor Unit	
The unit cannot be operated.	• Is the breaker turned on? • Is the power supply plug connected? • Is the ON timer set? Page 6
The unit cannot be operated for about 3 minutes when restarted.	• This protects the unit according to instructions from the microprocessor. Please wait.
The fan stops during the DRY operation.	• In DRY operation, the unit operates using the same refrigerant circuit as in COOL operation. DRY operation time has to be reduced in order to lower humidity without much room temperature decreasing. So the compressor sometimes stops, and at the same time the indoor fan stops. This prevents water condensed on the heat exchanger from evaporating again.
Mist is discharged from the air outlet of the indoor unit.	• The cool air from the unit rapidly cools moisture in the air inside the room, and it turns into mist.
The swing operation of the HORIZONTAL VANE is suspended for a while, then restarted.	• This is for the swing operation of the HORIZONTAL VANE to be performed normally.
The air flow direction changes during operation. The direction of the horizontal vane cannot be adjusted with the remote controller.	• When the unit is operated in COOL or DRY mode, if the operation continues with air blowing down for 0.5 to 1 hour, the direction of the air flow is automatically set to horizontal position to prevent water from condensing and dripping.
The unit starts operation by itself when the main power is turned on, but isn't received sign from the remote controller.	• These models are equipped with an auto restart function. When the main power is turned off without stopping the unit with the remote controller and is turned on again, the unit starts operation automatically in the same mode as the one set with the remote controller just before the shutoff of the main power. Refer to "Auto restart function" Page 4.
The indoor unit discolors over time.	• Although plastic turns yellow due to the influence of some factors such as ultraviolet light and temperature, this has no effect on the product functions.
Outdoor Unit	
Water leaks from the outdoor unit.	• During COOL and DRY operations, pipe or pipe connecting sections are cooled and this causes water to condense.
Remote controller	
The display on the remote controller does not appear or it is dim. The indoor unit does not respond to the remote control signal.	• Are the batteries exhausted? Page 3 • Is the polarity (+, -) of the batteries correct? Page 3 • Are any buttons on the remote controller of other electric appliances being pressed?
Does not cool	
The room cannot be cooled sufficiently.	• Is the temperature setting appropriate? Page 4 • Is the fan setting appropriate? Please change fan speed to higher setting. Page 5 • Are the filters clean? Page 7 • Is the fan or heat exchanger of the indoor unit clean? Page 7 • Are there any obstacles blocking the air inlet or outlet of the indoor or outdoor unit? • Is a window or door open? • When a ventilation fan or a gas cooker is used in a room, the cooling load increases, resulting in an insufficient cooling effect. • When the outside temperature is high, the cooling effect may not be sufficient.

Symptom	Explanation & Check points
Airflow	
The air from the indoor unit smells strange.	• Are the filters clean? Page 7 • Is the fan or heat exchanger of the indoor unit clean? Page 7 • The unit may suck in an odor adhering to the wall, carpet, furniture, cloth, etc. and blow it out with the air.
Sound	
Cracking sound is heard.	• This sound is generated by the expansion/contraction of the front panel, etc. due to change in temperature.
"Burbling" sound is heard.	• This sound is heard when the outside air is absorbed from the drain hose by turning on the range hood or the ventilation fan, making water flowing in the drain hose to spout out. This sound is also heard when the outside air blows into the drain hose in case the outside wind is strong.
Mechanical sound is heard from the indoor unit.	• This is the switching sound in turning on/off the fan or the compressor.
The sound of water flowing is heard.	• This is the sound of refrigerant or condensed water flowing in the unit.

In the following cases, stop using the air conditioner and consult your dealer.

- When water leaks or drips from the indoor unit.
- When the upper operation indicator lamp blinks.
- When the breaker trips frequently.
- The remote control signal is not received in a room where an electronic ON/OFF type fluorescent lamp (inverter-type fluorescent lamp, etc.) is used.
- Operation of the air conditioner interferes with radio or TV reception. An amplifier may be required for the affected device.
- When an abnormal sound is heard.

WHEN THE AIR CONDITIONER IS NOT GOING TO BE USED FOR A LONG TIME

1 Set to the highest temperature in manual COOL mode, and operate for 3 to 4 hours. Page 4
- This dries the inside of the unit.
- Moisture in the air conditioner contributes to favorable conditions for growth of fungi, such as mold.

2 Press ON/OFF to stop the operation.

3 Turn off the breaker and/or disconnect the power supply plug.

4 Remove all batteries from the remote controller.

When using the air conditioner again:

1 Clean the air filter. Page 7

2 Check that the air inlet and outlet of the indoor and outdoor units are not blocked.

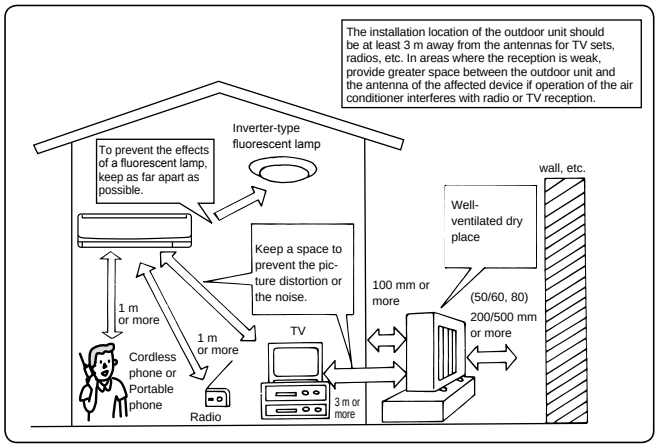
3 Check that the earth is connected correctly.

4 Refer to the “PREPARATION BEFORE OPERATION”, and follow the instructions. Page 3

INSTALLATION PLACE AND ELECTRICAL WORK

Installation place

Avoid installing the air conditioner in the following places.
- Where there is much machine oil.
- Salty places such as the seaside.
- Where sulfide gas is generated such as a hot spring.
- Where oil is splashed or where the area is filled with oily smoke (such as cooking areas and factories, in which the properties of plastic could be changed and damaged).
- Where there is high-frequency or wireless equipment.
- Where the air from the outdoor unit air outlet is blocked.
- Where the operation sound or air from the outdoor unit does not bother the house next door.


The installation location of the outdoor unit should be at least 3 m away from the antennas for TV sets, radios, etc. In areas where the reception is weak, provide greater space between the outdoor unit and the antenna of the affected device if operation of the air conditioner interferes with radio or TV reception.
To prevent the effects of a fluorescent lamp, keep as far apart as possible.
Inverter-type fluorescent lamp
wall, etc.
Well-ventilated dry place
Keep a space to prevent the picture distortion or the noise.
100 mm or more
(50/60, 80)
200/500 mm or more
1 m or more
1 m or more
TV
Cordless phone or Portable phone
Radio
3 m or more

Electrical work

- Provide an exclusive circuit for the power supply of the air conditioner.
- Be sure to observe the breaker capacity.

If you have any questions, consult your dealer.

SPECIFICATIONS

Model	Set name		MS-GF50VA	MS-GF60VA	MS-GF80VA
	Indoor		MS-GF50VA	MS-GF60VA	MS-GF80VA
	Outdoor		MU-GF50VA	MU-GF60VA	MU-GF80VA
Function			Cooling	Cooling	Cooling
Power supply			~ /N, 230 V, 50 Hz		
Capacity		kW	4.85	6.4	7.8
Input		kW	1.48	2.17	2.78
Weight	Indoor	kg	16		
	Outdoor	kg	38	57	72
Refrigerant filling capacity (R410A)		kg	1.20	1.30	1.85
IP code	Indoor		IP 20		
	Outdoor		IP 24		
Permissible excessive operating pressure	LP ps	MPa	1.64		
	HP ps	MPa	4.15		
Noise level	Indoor (Super High/ High/Med./Low)	dB(A)	45/42/38/34	48/45/41/37	50/47/43/39
	Outdoor	dB(A)	52	54	55

Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	35°C DB 24°C WB	46°C DB —
	Lower limit	21°C DB 15°C WB	21°C DB —

DB: Dry Bulb
WB: Wet Bulb

Note:

1. Rating condition
   Cooling — Indoor: 27°C DB, 19°C WB
   Outdoor: 35°C DB
2. Noise measurement is carried out in accordance with JIS C9612 and ISO 5151(T1).

EC DECLARATION OF CONFORMITY
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DÉCLARATION DE CONFORMITÉ CE
EG-CONFORMITEITSVERKLARING
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CE-ERKLÆRING OM SAMSVAR
EY-VAATIMUSTENMUKAISUUSVAKUUTUS

MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD
AMATA NAKORN INDUSTRIAL ESTATE 700/406 MOO 7, TAMBON DON HUA ROH, AMPHUR MUANG, CHONBURI 20000, THAILAND

hereby declares under its sole responsibility that the air conditioners and heat pumps described below for use in residential, commercial and light-industrial environments:
erklärt hiermit auf seine alleinige Verantwortung, dass die Klimaanlagen und Wärmepumpen für das häusliche, kommerzielle und leicht-industrielle Umfeld wie unten beschrieben:
déclare par la présente et sous sa propre responsabilité que les climatiseurs et les pompes à chaleur décrits ci-dessous, destinés à un usage dans des environnements résidentiels, commerciaux et d'industrie légère :
verklaart hierbij onder eigen verantwoordelijkheid dat de voor residentiële, commerciële en licht-industriële omgevevingen bestemde airconditioners en warmtepompen zoals onderstaand beschreven:
por la presente declara bajo su única responsabilidad que los acondicionadores de aire y bombas de calor descritas a continuación para su uso en entornos residenciales, comerciales y de industria ligera:
conferma con la presente, sotto la sua esclusiva responsabilità, che i condizionatori d'aria e le pompe di calore descritti di seguito e destinati all'utilizzo in ambienti residenziali, commerciali e semi-industriali:
με το παρόν πιστοποιεί με αποκλειστική της ευθύνη ότι οι τα κλιματιστικά και οι αντλίες θέρμανσης που περιγράφονται παρακάτω για χρήση σε οικιακό, επαγγελματικό και ελαφράς βιομηχανίας περιβάλλοντα:
através da presente declara sob sua única responsabilidade que os aparelhos de ar condicionado e bombas de calor abaixo descritos para uso residencial, comercial e de indústria ligeira:
erklærer hermed under eneansvar, at de herunder beskrevne airconditionanlæg og varmepumper til brug i privat boligbyggeri, erhvervsområder og inden for let industri:
intygar härmed att luftkonditioneringarna och värmepumparna som beskrivs nedan för användning i bostäder, kommersiella miljöer och lätta industriella miljöer:
ev, ticaret ve hafif sanayi ortamlarında kullanım amaçlı üretilen ve aşağıda açıklanan klima ve ısıtma pompalarıyla ilgili aşağıdaki hususları yalnızca kendi sorumluluğunda beyan eder:
настоящим заявляет и берет на себя исключительную ответственность за то, что кондиционеры и тепловые насосы, описанные ниже и предназначенные для эксплуатации в жилых помещениях, торговых залах и на предприятиях легкой промышленности:
erklærer et fullstendig ansvar for undernevnte klimaanlegg og varmepumper ved bruk i boliger, samt kommersielle og lettindustrielle miljøer:
vakuuttaa täten yksinomaisella vastuullaan, että jäljempänä kuvatut asuinrakennuksiin, pienteollisuuskäyttöön ja kaupalliseen käyttöön tarkoitetut ilmastointilaitteet ja lämpöpumput:

MITSUBISHI ELECTRIC, MS-GF50VA/MU-GF50VA, MS-GF60VA/MU-GF60VA, MS-GF80VA/MU-GF80VA

Note: Its serial number is on the nameplate of the product.
Hinweis: Die Seriennummer befindet sich auf dem Kennschild des Produkts.
Remarque : Le numéro de série de l'appareil se trouve sur la plaque du produit.
Opmerking: het serienummer staat op het naamplaatje van het product.
Nota: El número de serie se encuentra en la placa que contiene el nombre del producto.
Nota: il numero di serie si trova sulla targhetta del prodotto.
Σημείωση: Ο σειριακός του αριθμός βρίσκεται στην πινακίδα ονόματος του προϊόντος.
Nota: o número de série encontra-se na placa que contém o nome do produto.
Bemærk: Serienummeret står på produktets fabriksskilt.
Obs: Serienumret finns på produktens namnplåt.
Not: Seri numarası ürünün isim plakasında yer alır.
Примечание: серийный номер указан на паспортное табличке изделия.
Merk: Serienummeret befinner seg på navneplaten til produktet.
Huomautus: Sarjanumero on merkitty laitteen arvokilpeen.

Directives	Directivas
Richtlinien	Direktiver
Directives	Direktiv
Richtlijnen	Direktifler
Directivas	Директивы
Direttive	Direktiver
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2006/95/EC: Low Voltage Directive
2006/42/EC: Machinery Directive
2004/108/EC: Electromagnetic Compatibility Directive

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Yoji SAITO
Product Marketing Director

Issued:	**17 December, 2012**	**Tomoyuki MIWA**
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